



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/080,502

02/22/2002

Jeffrey L. Cleland

10466/286

8669

23552 7590 03/29/2007
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

AZPURU, CARLOS A

ART UNIT

PAPER NUMBER

1615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/080,502	Applicant(s) CLELAND ET AL.	
	Examiner Carlos A. Azpuru	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25, 29, 33-54 is/are rejected.
- 7) ☒ Claim(s) 26-28 and 30-32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of the amendment filed 11/28/2006.

The rejection under 35 USC 112, first paragraph for written description is hereby withdrawn.

The following rejection is maintained in this action:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-25, 29, 33- 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Merck & Co, Inc (WO'073).

WO'073 disclose a liquid polymeric composition for controlled release of a bioactive which comprises a solvent mixture of a hydrophobic solvent and a hydrophilic solvent, a bioerodible polymer, and a drug (see Abstract). The bioerodible nature of the polymers is disclosed at page 9, line 28. The composition is specifically recited for its lack of burst effect. The ratio of hydrophilic to lipophilic solvent is from about 80:20 to about 0:100 (see page 7, line 11). At page 8, lines 9-13, the ingredients are mixed with

Art Unit: 1615

dissolving of both the polymer and bioactive, with suspensions and encapsulation (gels) being less preferable, but within the scope of the invention. At page 15, lines 5-8, solutions and suspensions are specifically recited. The limitation of "solution, suspension or gel" is therefore met. The drug is found at a concentration of 1-30% (see page 1, line 22). The limitation of subsequent injection through a needle of specified size is considered an intended use for a composition. Less than 25% of the beneficial agent is released at 24 hrs as can be seen by Figure 1. The patent also discloses that the rate of initial drug delivery are controlled by the proportions of the hydrophilic and lipophilic solvents at given polymer and drug concentrations (See page 27, lines 24-26). Since each of these parameters is anticipated by the patent, the rate of the initial drug delivery would inherently also be anticipated. Polylactides, polyglycolides and their copolymers are specifically disclosed at page 10, lines 9 and 10. C6 Alkanols are specifically recited as hydrophilic solvents and include benzyl alcohol at page 10, lines 17-32. Hydrophobic solvents include benzyl benzoate at page 11, line 1. The viscosity range of less than 2000 centipoise is inherent to the composition since it is disclosed to have the same constituents, used for the same art recognized purpose, and administered in the same way. The solubility of the hydrophobic solvent is inherent to the solvents used, and is also disclosed as less than 1% at page 26, line 26. Peptides and proteins are recited for use in the drug delivery system at page 23, lines 7-27. Administration by syringe is recited at page 25, line 10. This would qualify as a container as well in the kit. Unit dosage is described at page 25, lines 16-17. Any drug delivery system or depot administered to the body is inherently sterile since infections

Art Unit: 1615

are not desired. A syringe inherently has a septum as part of its plunger system. Depots formed from the composition are discussed at page 27, lines 17-22. The instant claims are therefore anticipated by WO'073.

Response to Arguments

Applicant's arguments filed 11/28/2006 have been fully considered but they are not persuasive.

Applicant's remarks concerning the hydrophobic bioactive with respect to the hydrophobic solvent have been noted. Applicant goes on to argue that the WO'073 reference does not disclose the solubility of less than 1 wt% with "sufficient specificity", although acknowledging that the reference teaches a solubility in water of less than 10% of its lipophilic solvents. However, this determination is fact dependent. In this case, the range disclosed by the reference teaches value which are less than 10%. This includes values which are less than 1%. Further, the reference includes a specific recitation of benzyl alcohol which is one of the solvents used by the instant invention and clearly meets the limitation of solubility of less than 1%. The same polymer and solvents are used by the reference. As set out in MPEP, the determination of "sufficient specificity to constitute anticipation under the statute" is done only when no specific examples falling within the claimed range are disclosed. Clearly this is not the case since benzyl alcohol falls squarely within applicant's designated solvents and their solubility characteristics. As such, the rejection under 35 USC 102(b) is hereby maintained.

Claims 26-28 and 30-32 are objected to as dependent upon a rejected base claim.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

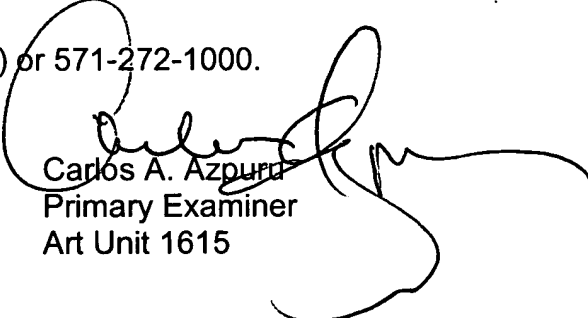
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Azpuru whose telephone number is (571) 272-0588. The examiner can normally be reached on Tu-Fri, 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone

Art Unit: 1615

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Carlos A. Azpuru
Primary Examiner
Art Unit 1615

ca